#### DOCUMENT RESUME

ED 426 327 CG 029 011

AUTHOR Zarin, H. K.

TITLE The Comparison of Depression in Ill and Healthy Adolescents

in Iran.

PUB DATE 1998-08-00

NOTE 10p.; Paper presented at the Annual Convention of the

American Psychological Association (106th, San Francisco,

CA, August 14-18, 1998).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Adolescents; \*Cancer; Chronic Illness; \*Depression

(Psychology); Foreign Countries; \*Hospitalized Children

IDENTIFIERS Iran

#### ABSTRACT

The development of depression in ill and healthy adolescents is explored and the question of whether hospitalization is accompanied by improvement in depression among cancer and non-cancer patients is addressed. Two studies, one between and one within subjects, longitudinal design with repeated measurement over 4 months, were carried out. MANOVA and ANOVA analyses were used. The three groups of subjects were (1) patients with cancer (N=30; mean age=15.5 years); (2) patients with some other disease (N=30; mean age=15.8 years); and (3) normal subjects (N=30; baseline age=16 years). Mean hospitalization was 55 days. The Beck Depression Inventory was used to assess depression. The pretest revealed a significant difference among the three groups in depression. After 4 months results show (1) depression was positively correlated with hospitalization stays of patients, and (2) there is a significant relationship between patients' (both groups) and healthy adolescents' depression. This study underscores the importance of evaluating patients' hospitalization stay in comparison with normal adolescents. (EMK)



# THE COMPARISON OF DEPRESSION IN ILL AND HEALTHY ADOLESCENTS IN IRAN

BY: H.K,ZARIN ISLAMIC AZAD UNIVERSITY OF DEZFUL PO BOX 113 DEZFUL -- IRAN

Objective; The purpose of this research was (1)to study depression and its development in ill and healthy adolescents. (2) Whether improvement depression during hospitalization was accompany by cancer and non cancer patients. Method One between and one within subjects, longitudinal design with repeated measurement MANOVA performers. Three groups of subjects studied were as follows (1) Patients with cancer (n=30, with mean of age 15.50 Yr.) (2) Patients with non cancer (n=30, mean of age 15.8 Yr.). The subjects participated in assessments of depression severity by BDI (beck depression inventory,1975), mean of hospitalization =55 day, a demographically similar group of normal comparison subjects (participated in baseline assessment.(N=30,mean of age 16).Result's After four months of study the following results accured (1) Depression was positively correlated by hospitalization stays of patients.(2) There is significant relationship between patients (cancer and non cancer) and healthy adolescent's depression Conclusions this study underscores the importance of evaluation patient's hospitalization stay in comparison to normal adolescents' patients.

The numerous and important factors related to depression, in DSM IV (American Psychological Association 1994) depression includes 'feeling of worthlessness or excessive or inappropriate guilt." In the study of depression and its cause and effect, the main study participated to find a more sufficient method to reduce depression. Beck, et al. (1985) Evaluated the efficacy of cognitive method in the control of depressive symptomatology of patients treated, these results found have been defined by the BECK Cognitive Model of depression related on three concepts; the cognitive triads, schemes, and cognitive errors (beck, et al., 1979). The cognitive triad refers to the depressed persons negative view of himself, his experiences, and the future. These are the cognitive structures that orient the individual to a situation in some schemes developed from core beliefs or expectations about

orient the individual to a situation in some schemes developed from core beliefs or expectations about

1

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

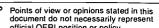
improve reproduction quality.



TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY





the self or others, such as safety, trust, power, self-esteem, and intimacy. Finally Each person has many senses, schemes that are understandable to the clinician, these enrich and develop across time. For example when a trauma occurs a negative schema develops to allow the person to make sense out of the his vulnerability and pain. This negative schema also serves to protect the individual from vulnerability in prevention sense by cognitive errors. As a result any chronic disease as much as possible to make individual to seeks their schema both their life experiences (like Chemotherapy, hospitalize and etc.). Leighton G, et al. (1990) Discussed, people in poor health are at great risk for suicide than without significant medical problems. Moffitt, karen (1985) in association of children in cancer has proposed the patients that suffer by cancer have decreased school attention, drop IQ score and reasoning (Anderson et al.,1989) In persprospectiv longitudinal study of persons with cancer reports depression rate was significantly more than control group. Canning, Emily and other (1992) and varni, James (1995) discussed separately the important of adolescence patients in cancer and some

#### THE DEPRESSION RANGES IN NORMAL GROUP

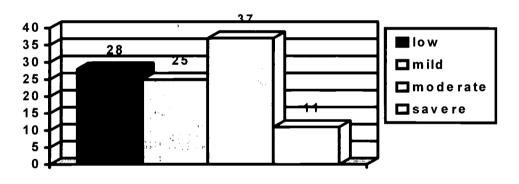


Figure number 1-Defined depression scores by subjects in

of their behavioral problems .Varni,james (1994) perceived stress and adjustments of long-term survivors of child hood cancer. Thirty-nine subjects completed the adolescent perceived events scale,SCL90 (aged 13-23).The subjects were from high school, they argue that patients show more depression and behavioral problems. At the results of this study engaged



to longitudinal evaluation of patients (cancer and non cancer) and normal adolescent's depression.

The three groups of subjects participated to complete BDI (Beck Depression Inventory) for evaluated their depression rates. The groups of this study were as follows;1-Thirty patients that suffering from cancer by mean of ages (15.50 Yr.) 2-thirty patients from non cancer disease like heart disease (the mean of age was 15.80 Yr.) And the mean of hospitalization was 55 days. Similar group of normal group comparison subjects participated in baseline assessment (N=30,MEAN OF AGE =16). All of the subjects participate to complete BDI in early first months (SEPT-OCT--DEC-NOV.). Figure number 1 defined depression scores in four rates from normal adolescents. At results of this figure the 37% of subject report moderate depression . figure number 2 and 3 as well as 1 defindes defrential depression rates between cancer and non cancer groups (P-4). The figures number four definde depression rates in comparison of months and three groups completly (p - 4)



## THE DEPRESSION RANGES IN CANSER GROUP

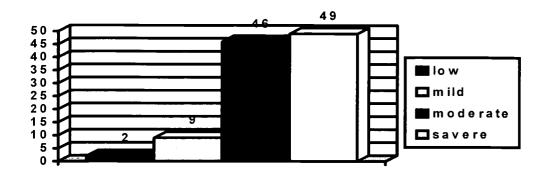
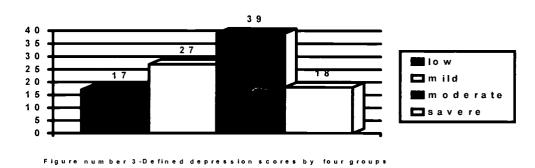
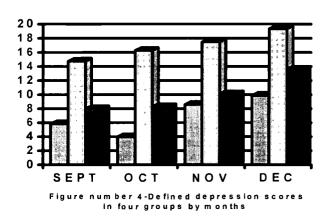


Figure number 2-Defined depression scores by subjects in four groups

## THE DEPRESSION RANGES IN NONCANCER GROUP



## THE DEPRESSION RANGES IN GROUPS BY MONTHS





BEST COPY AVAILABLE



# Statistical analyses of variables clear the format of research in table (1)

GROUPS/MONTH	TYPE/ MONTH	MEAN OF	STANDARD	CASES
		DEPRESSION	DEVIATION	
GROUP 1	Normal	07.87	5.51	120
MONTH I	SEPT.	05.86	5.25	30
MONTH 2	OCT.	07.00	4.82	30
MONTH 3	NOV.	08.60	5.80	30
MONTH 4	DEC	09.90	5.40	30
GROUP 2	cancer	16.94	7.70	119
MONTH 1	SEPT.	14.76	7.40	30
MONTH 2	OCT.	16.26	7	29
MONTH 3	NOV.	17.46	7.60	30
MONTH 4	DEC	19.33	8.30	30
GROUP 3	noncancer	10.02	5.80	
MONTH I	SEPT.	08.00	4.70	29
MONTH 2	ОСТ.	08.30	4.70	32
MONTH 3	NOV.	10.10	5.90	30
MONTH 4	DEC	13.60	6.10	30
FOR ENTIRE SUBJECTS		11.59	7.47	360

Table Number 1-The descriptive statistical analyze of groups and variables. This table report means of depression by months and groups.



By correlation between depression scores and variable of months The result is possible to clear in table number two.

MONTH	DECEMBER	NOVEMBER	OCTOBER	
NOVEMBER	MEAN=.9082	I		
	(N=90)			
	P=0.0001 **			
OCTOBER	MEAN=.0.8271	MEAN=0.9999		
	(N=90)	(N=90)		
	P=0.0001 **	P=0.0001 **		
SEPTEMBER	MEAN=0.8160	MEAN=0.9172	MEAN=0.9159	
	(N=90)	(N=90)	(N=90)	
	P=0.0001 **	P=0.0001 **	P=0.0001 **	

2- the correlation between depression scores and months.

\*\* p< 0.01 \*p<0.05

The results of table number two suggest, significant relationship between depression ranges in months. In multiple regression analysis, results appear significant relationship between cancer and months (R squares=0.25,F ratio 121.61,p<0.01). Finally two evaluate interaction variables here used a MANOVA repeated measurements these results appear clearly in table number three. By inferential statistical analyze (MANOVA repeated measurement's design) report appears depression rates of subjects by within and between groups' interactions.

_	SOURS OF VARIATION	SS	MS	DF	F	P
N GROUP	WITHIN CELLS	36	139.56	87	18.40	0.0001
	GROUP	9	4	6		
	WITHIN CELLS	1	6	261		
WITHIN GROUP	FACTOR 1	3	382.48	3	63.75	0.0001
	FACTOR * GROUP	69.31	11.55	6	1.93	0.077

Table number 3 reports Manova repeated measurement with one between and one within subject's factor.



The statistical analysis between groups has shown significant rates of depression from pretest evaluation (table number 3)The within group's analysis of data there not show any significant differences between factor number one (months) and groups. This report defines that although the first comparison of means at pretest was significantly difference. Development of depression at months, does not clear any significant difference, between interaction of group and the ''time'' factor. In view of tow group copartner's research, results appear patina's cancers( group) have more depression rates than group number 1, and 3 (normal and noncancer groups).

#### **RESULT**

Figure's numbers 1 to 4 and table shows the means and standard deviation and rates of depression for the four months of study by BDI.As an inferential statistical analysis, between within groups' differences on these measures, the authors prefer to use 3 4 MANOVA repeated measurement and correlation. In which the months and groups are independent variables. The MANOVA revealed a significant difference among three groups by pretest, ordinary (first cancer, then non cancer, and finally normal group) was (P <.001). There are not significant interaction between time factor and (p< .001). Because the omnibus test for a difference between depression development diagnostics' groups, data in a univriate analysis of variance (one way ANOVA)was conducted for each variable in base of results. Cancer patinas had significantly more depression than other groups (fig- no 2 table no 1 and 3) probability levels equal to, (p<.001,f ratio =65.165). In comparison of groups and depression by one way analysis the data reports significant different between depression rates of groups no 1 (normal) and 3 (non cancer) & no 1 and 2 (cancer) & group's number 2 and 3. (F =65.165 P= <..001). In base of months and rates of depression by ONE-WAY, data reports significant difference in months and depression in normal group between months 1 and 4 (F=3.27,p<.005) In comparison of cancer group results appear non significant difference between months and depression (F=1.92,P<.1292)and finally non cancer group appear significant difference by months of 1,2 and 4 (F = 6.74 p < .05).



#### DISCUSSION

Due of high significant difference between months, depression and groups the MANOVA and ONE-WAY methods participated to report this results 1- significance difference of depression rates between ill and healthy adolescence's. 2- In comparison to patients, cancer patients had more depression than two groups and finally rate of depression in non cancer groups was more than normal group. This finding with regard to hospitalization is consistent with previous research. Cancer group in comparison to non cancer due to its kind of treatment and its future of treatment, seem make more effective cause of their depression rates. Moreover, results of depression in normal adolescents clear significant difference by months, it makes the possible by Seasonal Affective Disorders, school final exam, or adolescents identify problems.



#### REFERENCES

Anderson, Barbara and et al. (1989) ,Controlled prospective longitudinal study of person with cancer Journal of, consulting and clinical psychology; v57,N 6. P 692-7 DEC 1989

Beck, A. Et al. (1979) Cognitive therapy of depression, new York; Guilford press.

Beck, A. & emery, G. (1985). Anxiety disorder and phobia; a cognitive perception, basic book; new York, 1985

Canning, Emily and et al. (1992). Depressive symptoms and adaptive style in children with cancer. Journal of American academy of child and adolescent psychiatry.1992.Nov.,vol,31 (60) p 1120 --1124

Lighten,G. Et al. (1990). College student suicide. Haworth press. P -- 129.

Moffitt, Karen (1985). Childhood cancer: paper presented at the council for exceptional child's division for early child hood conference on children with special needs (Denver CO,Oct. 6-8 1985). A

Vary, James and et al. (1994). Perceived social support and adjustment of children with diagnosed cancer. Journal of developmental and behavioral pediatrics; 1994 Feb. Vol. 15 (1) p 20- 26.

Varny, James. And et al. (1995) .Perceived stress and adjustment of long term survivors of child hood cancer. Journal of psycho-social oncology; 1995 vol. 12 (3).





I. DOCUMENT IDENTIFICATION:

# U.S. Department of Education

Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



# REPRODUCTION RELEASE

(Specific Document)

Title: Comparison of C	pepression"ill and health	hy Adolescents in IRAN
Presente in A	PA 1998.	
Author(s): HAMID-K,Z/	ARIN MA	
Corporate Source: A.P.A. 1998 - AU MISLAMIC HZAD UNIVERS	Presented in 16.14-18- San. Francisco. U. 14.19- OF-DEZFUI- Po Box 113	Fublication Date.
II. REPRODUCTION RELEASE:		
monthly abstract journal of the ERIC system, Re and electronic media, and sold through the ER reproduction release is granted, one of the follow	timely and significant materials of interest to the education (RIE), are usually made avail IC Document Reproduction Service (EDRS). Creating notices is affixed to the document.	able to users in microfiche, reproduced paper co dit is given to the source of each document, and
The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
sample	Sample	

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.

TO THE EDUCATIONAL RESOURCES

INFORMATION CENTER (ERIC)

Level 1

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

TO THE EDUCATIONAL RESOURCES

INFORMATION CENTER (ERIC)

Levei 2A

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

TO THE EDUCATIONAL RESOURCES

INFORMATION CENTER (ERIC)

Level 28

2B

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document
as indicated above. Reproductión from the ERIC microfiche or electronic media by persons other than ERIC employees and its system
contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies
to satisfy information needs of educators in response to discrete inquiries.

Sign here,→ please

Organization/Address:

Printed Name/Position/Title: HAMI Do K, ZARIN- Dean of

EDUCATION FACULTY, comparison of nepression in ill and no rmal

Telephone: 0 098. 641 50601-3 FAX: 0098,6412666013

ISLAMICAZAD, University of Dezful-IRAN E-Mail Address:

Date: 1998 - Nov



# ERIC COUNSELING AND STUDENT SERVICES CLEARINGHOUSE

201 Ferguson Building • University of North Carolina at Greensboro • PO Box 26171 Greensboro, NC 27402-6171 • 800/414.9769 • 336/334.4114 • FAX: 336/334.4116 e-mail: ericcass@uncg.edu

#### Dear 1998 APA Presenter:

The ERIC Clearinghouse on Counseling and Student Services invites you to contribute to the ERIC database by providing us with a written copy of the presentation you made at the American Psychological Association's 106th Annual Convention in San Francisco August 14-18, 1998. Papers presented at professional conferences represent a significant source of educational material for the ERIC system. We don't charge a fee for adding a document to the ERIC database, and authors keep the copyrights.

As you may know, ERIC is the largest and most searched education database in the world. Documents accepted by ERIC appear in the abstract journal Resources in Education (RIE) and are announced to several thousand organizations. The inclusion of your work makes it readily available to other researchers, counselors, and educators; provides a permanent archive; and enhances the quality of RIE. Your contribution will be accessible through the printed and electronic versions of RIE, through microfiche collections that are housed at libraries around the country and the world, and through the ERIC Document Reproduction Service (EDRS). By contributing your document to the ERIC system, you participate in building an international resource for educational information. In addition, your paper may listed for publication credit on your academic vita.

To submit your document to ERIC/CASS for review and possible inclusion in the ERIC database, please send the following to the address on this letterhead:

- (1) Two (2) laser print copies of the paper,
- (2) A signed reproduction release form (see back of letter), and
- (3) A 200-word abstract (optional)

Documents are reviewed for contribution to education, timeliness, relevance, methodology, effectiveness of presentation, and reproduction quality. Previously published materials in copyrighted journals or books are not usually accepted because of Copyright Law, but authors may later publish documents which have been acquired by ERIC. However, should you wish to publish your document with a scholarly journal in the future, please contact the appropriate journal editor prior to submitting your document to ERIC. It is possible that some editors will consider even a microfiche copy of your work as "published" and thus will not accept your submission. In the case of "draft" versions, or preliminary research in your area of expertise, it would be prudent to inquire as to what extent the percentage of duplication will effect future publication of your work. Finally, please feel free to copy the reproduction release for future or additional submissions.

Sincerely.

Jillian Barr Joncas

Assistant Director for Acquisitions and Outreach



